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# Mobile Payments

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# Mobile Payments – what are they?

- Use of mobile device such as PDA or cell phone to purchase goods and services
  - In essence, payment is “authorized” via mobile device
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# Is there a market for m payments

- In Europe and Asia, The market for mobile transactions is expected to be worth just over US\$380 billion by 2010.
  - U.S?
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# Why use m-payments

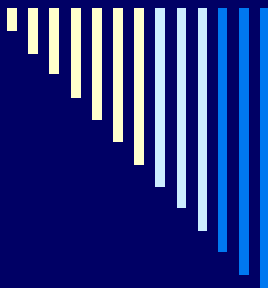
- Convenience
  - Ability to aggregate micro payments
  - Security issue – not wanting to provide credit card info over wireless network
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# For what are m-payments used?

- Prepaid top up for **mobile** users.
  - Cash-replacement such as:
    - parking
    - vending machines
    - road tolls.
  - Content download.
  - Discretionary/convenience shopping such as:
    - ticketing
    - transport
    - event
    - cinema
    - every-day purchases (milk, bread, newspapers).
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# How does user “pay” for goods and services?

- ❑ ACH debit from bank account
  - ❑ Credit Card transaction
  - ❑ Prepaid value
  - ❑ Billing to phone bill
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## Another feature – Mobile Wallet (Example – T-Mobile UK)

- **What is Mobile Wallet?** Mobile Wallet is a safe and secure place you can store information of your credit and debit cards. It provides you with a user-friendly way to pay for goods and services, using your WAP-enabled mobile device, on either WAP or the Internet with a selection of shops.
- **What are the features of Mobile Wallet?** Mobile Wallet provides you with the opportunity to buy goods via WAP or the Internet using payment information you can store securely online. When registering for Mobile Wallet, you can store details of up to 8 payment cards and 8 delivery addresses. During registration you need to select your own 4-digit PIN. This is the code you will use to confirm transactions via WAP on your mobile phone. Transactions via the Web will be confirmed by inputting an SMS code sent to your phone.



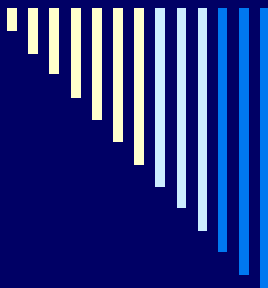


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# Mobile Wallets continued

- **How does Mobile Wallet work? We** store details of up to 8 of your credit and debit cards on a highly secure system. When you want to buy something, instead of having to enter your whole card number and all your personal details, you can use your Mobile Wallet instead. You simply choose which product or service you want to buy and confirm your purchase by entering your Mobile Wallet PIN. The system even stores up to 8 addresses for deliveries, which can be changed at any time. Shopping with your mobile has never been so quick and simple.
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# Example of typical m-payment service (Paybox)

- What is paybox? paybox is a new payment method that allows end consumers to make easy and secure payments using your mobile phone. All transactions are securely conducted over the existing GSM mobile phone network. Transactions are secure using tried and true digital network technology, and it is compatible with any bank account, any GSM mobile phone, across any mobile network.

paybox enables consumers to purchase goods and services, even make bank transactions with their mobile phones. Our vision is for paybox to be the worldwide leading secure and convenient mobile payment service for the physical "real" world and the virtual "online" world.

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# Paqybox example continued

- paybox is the world's first mass-marketable payment method for mobile telephones and was launched successfully in Germany in May 2000.

- **Because your mobile is more than just a phone!**

**Send money:** to all mobile numbers and bank accounts

- **Receive money:** anytime and anywhere
  - **Pay securely:** on the internet and in the high street
  - **Reload:** your prepaid mobile phone card
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# PAYING FOR FLIGHTS BY PHONE

- Norwegian telco Telenor has teamed up with the country's national airline to enable travellers to purchase flight tickets via their mobile handsets. Telenor is using an SMS-based system to allow mobile users to search for available flights and then book and pay for them all from their mobile phone.
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# Bill on Behalf of /Bill to phone

- - For qualified Next Generation customers, certain approved merchants allow purchases to be billed to your wireless bill ("Bill to Phone"). These purchases will appear in a separate section on your wireless bill. This option is not available to GoPhone, prepaid or Digital service customers. The terms and conditions in this Bill to Phone section govern the relationship between you, AT&T Wireless and Wells Fargo Bank, N.A., the Payment Processor for Bill to Phone. The Payment Processor provides you with the payment functions for the Bill to Phone option.
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# Regulatory Issues

MAY 2004 – EC launches consultation  
(note closed July 20 2004)

Question:

*Should certain types of mobile  
payments be subject to EC E-Money  
Directive?*

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## EC suggested position on e-payments

- Prepaid cell phone services are not within the scope of the E-money Directive
  - Prepaid accounts for third party goods and services likely to be considered E-money
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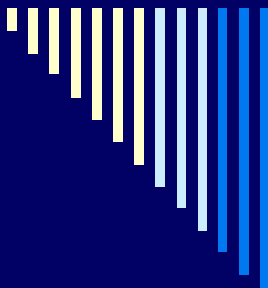


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# E-Money Definition

For these purposes, "electronic money" is defined as

1. monetary value
  2. stored on an electronic device,
  3. issued on receipt of funds of an amount not less in value than the monetary value issued and
  4. accepted as a means of payment by undertakings other than the issuer.
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- There are some exemptions -- for example for "small issuers" who issue e-money below a certain threshold -- but these exemptions are very narrow.
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# Consequences of applying E-Money Directive to m-payments

- ❑ Redeemability
  - ❑ Liquidity requirements
  - ❑ Prudential supervision (min. capital and reporting requirements)
  - ❑ Anti money laundering requirements
  - ❑ Prohibition of other activities
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## U.S. – Are State Money Transmission Laws Applicable?

Bill on behalf of (BOBO)  
arrangement may take care of this  
issue (Consumer's debt is  
extinguished by paying his phone  
bill thus phone company is not  
“holding the money”)

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# Money transmission continued

- Prepaid accounts used to purchase goods and services from multiple merchants is a murkier area
- One example: Company set up accounts from which consumers could buy burgers, coffee, sub sandwiches from host of merchants; Accounts were pre-funded.

Might be viewed as money transmission

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# Jurisdictional issues

- Consumer roams and makes transactions with merchant – where are they taking place?
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